

HW: p. 72 #6, 7, 17, 29 and p. 95 #8, 24 (not d), 26

- 6) (a) bimodal, symmetric
(b) unimodal, right skewed
(c) unimodal, symmetric
(d) uniform, symmetric
- 7) (a) bimodal, slight right skew, center around 32%, range of (0, 64)
(b) the peak in the lower end is from the healthier cereals, and the peak in the higher end is from the unhealthier, sugary cereals.
- 17) I would use the mean and standard deviation since the distribution is roughly symmetric

- 29) (a) mean = \$525
median = \$450
(b) only 2 out of the 12 employees earn more than the mean
(c) the median
(d) the range and the IQR, because we chose the median as the measure of center
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p. 95

- 8) (a) you can see in both distributions that the data is right skewed
(b) in the histogram you can see the mode and the second peak, however you can see the outliers in the boxplot
(c) center = median, because it is skewed
(d) spread = range and IQR, because we chose the median as the center

24) (a) skewed right because the mean is higher than the median

(b) $IQR = 36.50$

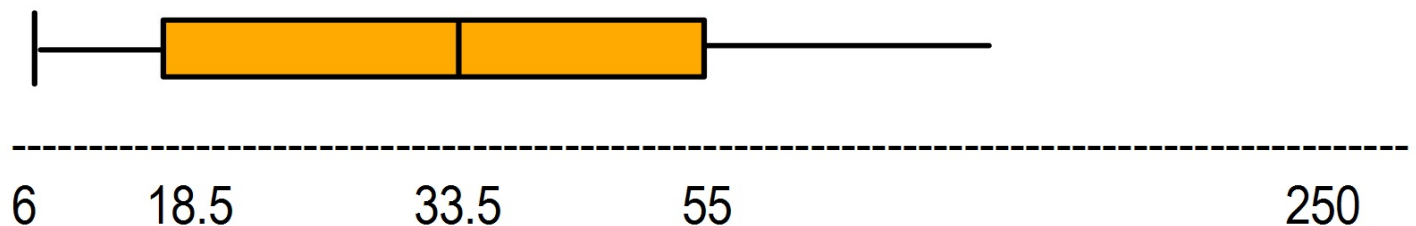
$$1.5 * IQR = 54.75$$

$$LF = Q1 - 54.75 = -36.25$$

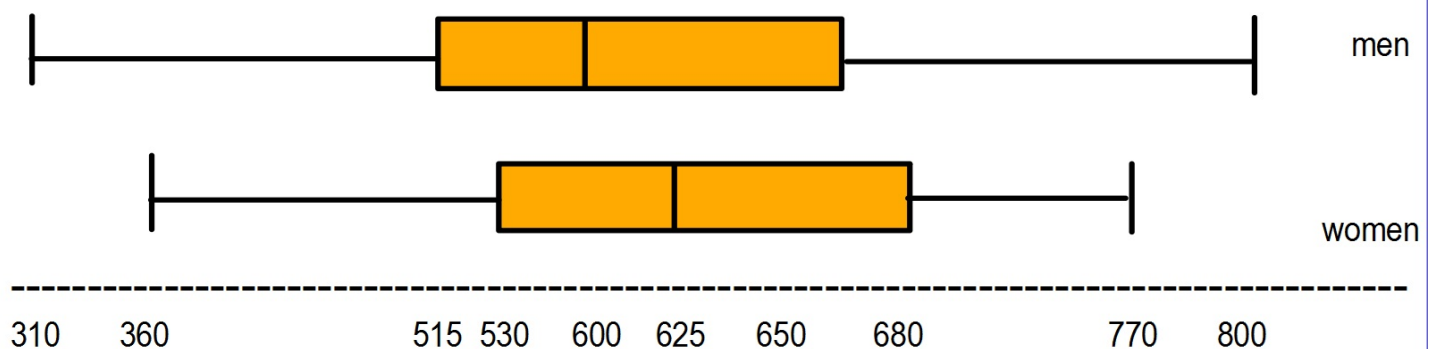
$$UF = Q3 + 54.75 = 109.75$$

Anything below -36.25 and above 109.75 is considered an outlier. So there is **at least 1** outlier: the maximum of 250

(c)



26) (a)



(b) Shape: Men are approx. symmetric, and women are slightly left skewed

Center: Men have a mean of 590, which is lower than the Women's median of 625.

Spread: The range of the men is (310, 800) which is larger than women's range of (360, 770). The men have a std. dev. of 97.2, and the women have an IQR of 150.

